Common Core Standards Workgroup Review of K-8 Standards

A Report by the Appalachia Regional Comprehensive Center
for the Kentucky Department of Education

Purpose and Participants

The Kentucky Department of Education (KDE) convened the second meeting of Common Core Standards workgroups in Frankfort, Kentucky, on November 16–17, 2009. Language arts and mathematics workgroups met to review early drafts of the *K-12 Common Core Standards,* an initiative of the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center). Each group included approximately 25 participants representing elementary, middle, and high schools, as well as colleges and businesses from various regions of the state.

Jeannine Branch and Claudia Runge of the Appalachia Regional Comprehensive Center (ARCC) served as facilitators for the general sessions, and KDE staff served as facilitators and note takers for the small breakout group sessions.

Process

Felicia Cumings Smith, associate commissioner for the Office of Teaching and Learning, started the day with a welcome to the entire group. The participants then broke into content-specific groups. Within each content group (math and language arts), participants regrouped into four grade-specific groups (elementary, middle, high school, and higher education). The first task was to read, review, and record individual observations about the set of standards appropriate for each group. The following questions from CCSSO provided a focus for participants' reading and subsequent discussion:

1. *Is the architecture of the draft standards clear and easy to follow? How can we ensure the documents are designed to be accessible for all audiences?*
2. *In what ways does this early draft convey a coherent vision of the discipline? What else is needed to enhance a coherent vision?*
3. *To the extent that the early drafts provide progressions for grade-level/grade-span expectations, does the document present a rigorous, yet reasonable, continuum of expectations?*
4. *Is the language in this early draft clear, concise, and precise? Please identify any areas where more concision and precision is needed.*
5. *If you could add and/or remove <u>ONE</u> concept or skill, what would it be? Please provide an explanation/justification.*
6. *Do you have any other general feedback about the draft standards?*

In addition, CCSSO asked for feedback to three questions that were specific to the high school standards:

- *How should high school material be presented?*
- *How would you use an arrangement into blocks (with connections between indicated) in designing curriculum in your state?*
- *Do you want us to indicate different pathways through the high school standards and if so, how?*

Participants spent the entire day of November 16 reading the set of standards for their grade level and discussing their impressions based on the questions above. At the end of the day, the grade-level groups within each content area shared their observations and impressions, which are summarized later in this report.

Day 2 began with a short presentation by KDE staff to demonstrate that questions posed during the September review of CCSSO's *College and Career Readiness Standards* (CCRS) had been addressed in the current drafts of the K-12 standards.

Participants continued to meet with grade-level/content-area groups from Day 1. Each group responded to questions specific to requirements spelled out in Kentucky Senate Bill 1, passed by the 2009 Legislature. The groups reflected on their review of standards from Day 1 to respond to the following SB1-related issues:

1. *The standards include rigorous content, focus on critical knowledge, skills, and capacities needed for success in the global economy.*
2. *The standards result in fewer, but more in-depth standards to facilitate mastery learning.*
3. *The standards communicate expectations more clearly and concisely to teachers.*
4. *The standards communicate expectations more clearly and concisely to parents, students, and citizens.*
5. *The standards are based on evidence-based research.*
6. *The standards consider international benchmarks.*
7. *The standards are aligned so that students can be successful at each educational level.*

Groups discussed and charted their responses. Groups participated in a structured gallery walk, which allowed each group to see and discuss the responses of all the other groups. They noted points of agreement and acknowledged points of difference. A summary of their observations is included at the end of this report.

During the second half of Day 2, participants in each large content group were divided into smaller groups so that all grade levels were represented within each small group. Participants focused on one idea: *In order for any academic standards to have an impact on teaching and learning, they must be attainable within the course of a school calendar year. What supports will Kentucky educators need to integrate the K-12 Common Core Standards into their practice?* Participants responded to the question individually, and then shared within their small groups. Each group organized its ideas into categories to share with other participants in the content area of math or language arts. As groups shared their ideas , they looked for commonalities and listened for new ideas that were presented. A summary of ideas and suggestions is included below.

Reaction Summary – CCSSO Questions

Mathematics

The math standards were sent from CCSSO in two distinct stages of development. CCSSO's letter accompanying the standards pointed out that these were very early drafts and that CCSSO was seeking input from states to help shape the final versions. Math K-8 standards were much more developed than high school standards; the letter pointed out that the K-8 standards represent a proposal for a public document. Drafters of the standards explained in the letter that for high school, they are considering a series of progressions, each arranged into blocks of material that could be constituted into traditional math courses or integrated into courses at the high school level. High school standards released for review consisted of one progression in the area of functions and coordinates. Consequently, reviewers of the K-8 standards (elementary and middle school groups) had much more complete material to review, and their findings were very different from the reviewers (high school and postsecondary groups) of high school material.

In general, the elementary and middle school reviewers responded positively to the CCSSO questions. They agreed that the architecture of the draft standards is clear and easy to follow, they flow from grade to grade, and the introductory narrative for each strand provides useful background information for all stakeholders. Reviewers suggested including illustrations and examples within the documents to improve accessibility for all stakeholders. They suggested that the readability level of the standards be checked; however, the groups did not advocate removing math-specific language, which they felt is necessary to precisely and accurately present concepts and skills. Each group agreed that including a glossary would address the issue of accessibility. The elementary group felt that emphasis on numeracy provided coherence throughout, but they also provided several suggestions to improve coherence: address transition points (e.g., Grade 5 to Grade 6), include benchmark assessments, and include information about prior knowledge needed for each strand. Both groups agreed that the K-8 standards represented rigorous and reasonable expectations. Language was judged to be imprecise and general in some instances; however, elementary and middle school reviewers noted that embedded examples as well as the previously mentioned glossary could clarify imprecise language. Middle school reviewers were concerned that some concepts seemed to be missing from the standards (e.g., rational numbers, mean/median/mode, real-world math). Elementary reviewers pointed out that estimation should be introduced at an earlier grade if it is to be explicitly addressed in Grade 5. They also said that "telling time" and money skills should be addressed more explicitly at a developmentally appropriate age. They concluded by expressing their appreciation for the emphasis on numeracy acquisition as critical to mathematics education; however, they hope for an emphasis on developmentally appropriate mathematical pedagogy as the standards are further developed. Middle school reviewers suggested the development of another document to show the progression of each standard throughout the grades.

High school and postsecondary reviewers noted that in their current state, the high school standards were difficult to follow. They suggested a clearer connection to the *College and Career Readiness Standards*—pointing out that the prospect of various pathways, progressions, and endpoints described in the introductory letter may cause confusion for teachers—and insisted

that core standards should be for all students. High school and postsecondary groups did not agree that these standards represented a reasonable continuum of expectations. They felt that the "Functions and Coordinates" progression was too far-reaching and that the list of concepts and skills within that progression seemed to be "a mile wide and an inch deep." These groups pointed out that high school standards should provide the link from Grade 8 standards to the *College and Career Readiness Standards*. The reviewers noted that verbs representing higher order thinking skills were missing and that definitions in a glossary or embedded examples should be included to explain imprecise terms (e.g., appropriate, intuitive, critically). The postsecondary and high school reviewers agreed that some concepts should be removed (e.g., parametric curves, conics, and log-log and semi-log). Postsecondary reviewers suggested extending beyond "concepts and skills" by adding another category—reasoning/thinking skills. Modeling should be embedded throughout the standards.

In response to the three extra CCSSO questions about the high school standards, the high school and higher education reviewers made the following points:

- They like the current presentation of big ideas with no labeling as to grade levels or courses.
- They are curious about assessments that will eventually accompany the standards, wondering if they will be presented by grade, course, or some other manner.
- The block format should be presented in the same format used in the *College and Career Readiness Standards*.

The reviewers noted that the blocks arrangement could be easily adapted for integrated mathematics courses or traditional mathematics courses, depending on the curriculum being used in a state, district, or school. They hope for clearer connections between blocks in the coming drafts of the high school standards. The blocks format will allow for introductory to mastery levels within each block if schools choose such a design. Different pathways for high school students should not be mandated or written into the standards; however, examples of different pathways might be presented for those states or schools wanting to employ pathways in their curricula.

Language Arts

Because the format followed a predictable pattern, the reviewers found the structure of the language arts standards to be clear. However, most said they would prefer a more "streamlined" format that would allow stakeholders to easily see the progression of skills across several grade levels. Reviewers suggested using comparison tables in which each section could be outlined for Grades K-3, 4-5, and 6-8. In addition, the reviewers felt that different versions of the standards would be needed for specific audiences—for example, parents might not be familiar with all of the terminology in the present version and might find the current version too lengthy.

Reviewers found the language to be consistent across the grade levels and also liked the use of guide words like "detective reporter." Other positives were the Language Tables for the various grade levels, although the group would have preferred the skills to be presented in chart form. Some reviewers suggested that the use of a flow chart could show visually the progression of skills over time.

Additional suggestions included simplifying the overview at the beginning and end of the grade level sections and labeling the standards (i.e., R1, W1, etc). Reviewers wanted to see more of a connection between reading, writing, listening, and speaking (i.e., the skills seemed to be presented in isolation and the connection among them and other content areas was not addressed sufficiently).

In response to the question regarding the "coherent vision of the discipline," reviewers felt there was a coherence between grade levels, but again were concerned with the apparent lack of integration across the language arts components (i.e., reading like a writer, critical thinking, writing to learn and to demonstrate understanding). Reviewers also questioned the focus on drama and wondered about the appropriateness of placing it in Language Arts rather than Arts and Humanities. Other concerns included the following: "reading for pleasure" was not mentioned, quality literature should be emphasized, and more current periodicals and newer publications be included in reading lists. There were questions about what drove the decisions on suggested texts and how the texts were to be used. For example, are they required or just examples? Finally, all reviewers felt the need for a clear discussion of reading and writing in the content areas and the role of content area teachers in teaching reading and writing. In general, the standards do not support a schoolwide literacy plan.

With regard to question #3, which dealt with the rigor of expectations, reviewers felt that the content seemed overwhelming and that the rigor was more implicit then explicit. They worried that teachers might target exactly what the standards say and not go beyond. Some reviewers suggested more clarity and distinction in topics, and others found some gaps in skills that need to be addressed. Elementary reviewers suggested that the Foundations section appear before the Reading section; and they also thought by numbering the Skills section might help readers to see the skills as a continuum to be studied in sequence. Reviewers also mentioned the lack of high-interest, developmentally appropriate adolescent literature and noted the discrepancy between what students were being asked to read and what they were asked to write.

The reviewers felt that the draft's language was not always clear, concise, and precise. They saw the vocabulary as varied and inconsistent (e.g., the use of the word "temporal" on page 12, "additive" words on page 13, and "word recognition basics" on page 15). Reviewers also noted that the Reading Core Skills of Grades K-3 and 4-5 are identical except for the word "explore" in #14 of the Grades 4-5 standards, and this seems to make the progression to the higher grades more imprecise and unclear. They would like definitions to be included for vocabulary such as "reasonable" and "fluency"; other parts of the standards included vague phrases such as "other narrative strategies" (p. 12) and "text structures" (p. 13). Other examples of terms that need to be clarified include "organizational patterns, literary elements, persuasive techniques," "depth and complexity of inference," "mastery," and "privilege evidence." The group felt that if these standards are to be the basis of the curriculum for most or possibly all of our country, then language and expectations should be extremely clear, with little left for interpretation. During the discussion of this issue, participants also observed that students are asked to read poetry, but not to write it, and that there was misalignment of core text types. Finally, the language used when describing "citing sources" was different in the Writing and Speaking sections of the document.

When asked about adding one concept or skill to the document, reviewers again mentioned a stronger connection between the various strands of the standards. Reviewers also pointed out that the following should be added in Writing: writing to demonstrate learning, writing to learn, persuasive writing techniques (argumentative writing), higher quality writing exemplars, and literary writing. In the area of reading, reviewers again mentioned the issue of reading context textbooks, comprehension strategies, fluency, connecting and reflecting text to self, and adding grade-specific texts that are developmentally appropriate. Reviewers also felt that benchmarks for such things as comprehension, fluency, and sight words would be preferable.

Reviewers felt that the narrative text example, "My Trip to the Dr's Office," should be removed and that sample writing pieces with errors were distracting and should be replaced. They also felt that reading lists should be eliminated unless there were multiple options and that the Mastery of Conventions Skills (p. 11, #9) should be redone.

Reaction Summary – Senate Bill 1 Questions

Mathematics

Elementary and middle school reviewers agreed that the K-8 standards contained rigorous content and critical knowledge and skills necessary for success in a global economy. As evidence, the groups cited the inclusion of an emphasis on foundational mathematical understandings, applied knowledge, problem solving, critical thinking, and explicit grade-level expectations that increase in rigor at each grade. By comparing the number of Kentucky's current standards to the *K-8 Common Core Standards*, elementary school reviewers found evidence of fewer, more in-depth standards. They liked having an area of emphasis for each grade level, less repetition, the possibility of better pacing, and a higher level of understanding and mastery. K-8 standards were determined to be clear and concise for teachers and all stakeholders. Grade-specific narratives provide clarity, skills and concepts are clear, and statements are more descriptive and less dense. Elementary reviewers pointed out that the standards include examples of critical mathematical vocabulary and practices and practical instances of conceptual understandings. The current draft of the middle school standards did not contain examples and resources, and reviewers felt that the inclusion of examples in future drafts would improve clarity for all stakeholders. Although this draft of K-8 standards did not cite research or international benchmarks, reviewers noted that the *College and Career Readiness Standards* included connections to volumes of research and numerous international benchmarks. They assume that the K-8 standards derived from the research and international benchmarks cited in the CCRS. Elementary and middle school reviewers agreed that the K-8 standards are aligned so that students can be successful at each level. The grade-level expectations build on prior knowledge, they follow a logical sequence, and coherency from knowledge to application is apparent within each grade level.

As previously noted, the high school standards are considerably less developed than the K-8 standards. High school and postsecondary reviewers pointed out that they need to see the standards at a later stage of development before making final determinations about a match to Senate Bill 1 requirements. The high school standards appear to be rigorous and include a focus

on critical knowledge in the progression that was presented (Functions and Coordinates). This progression contains some implied applications, problem solving, and reasoning; however, reviewers noted that mathematical practices (21st century skills considered a strength of the CCRS) are missing from the high school standards. They pointed out that success in a global economy will require students to communicate mathematics understanding, but they did not find that requirement in the high school standards. The high school standards do not meet the "fewer" criterion called for in SB 1. The one progression reviewed included 10 blocks with a total of 86 concepts and skills, with more progressions to be added. Although some of the standards are more in-depth, some reviewers felt that the standards contained more complex functions but did not support deeper understanding.

High school and postsecondary reviewers agreed that the high school standards need examples to clearly communicate their meanings to all stakeholders. Reviewers pointed out that inconsistent, incomplete, and imprecise language needs to be reworked if clear communication is to be achieved. The high school progression provided neither evidence of a research base nor consideration of international benchmarks. However, reviewers assumed that the finished standards document will include such evidence, especially since the CCRS document contained a research base and international benchmarks. Participants were unable to make a determination about alignment of the standards for student success. Too little information was available in the one progression that was provided for review; however, the reviewers agreed that connections must be provided to show vertical and horizontal alignment when the final document is released.

Language Arts

Elementary, middle and high school reviewers felt that the language arts standards were rigorous and focused on critical knowledge, skills, and capacities needed for success in a global economy; however, the group did have a few recommendations. The elementary group mentioned that the standards did not specify writing genres associated with business (i.e., letters, e-mail, proposals, etc.). The high school group felt that the text list did not support rigor for all, that there was not enough emphasis on texts with the same theme and genre, and that more emphasis on critical discourse and critical thinking skills was needed.

The language arts group felt that the standards were fewer and more in-depth as a whole. The group felt that the standards represented essential skills and concepts, and seemed to be written to allow teachers to make decisions. The high school evaluators felt that the standards were more in-depth and that the language in the standards represented high levels for depth of knowledge; however, they noted that the number of standards for high school were more rather than fewer.

When considering the continuum in terms of reasonable expectations, the elementary group felt that the standards were, for the most part, clear and concise for teachers, but that there was too much language that many parents would not understand and that terms would need to be clarified. They felt that the standards did, however, clearly show all exactly what is expected at each grade level and provide a common language for discussion. This sentiment was also expressed by the middle school group, who added that the standards' format helped to focus educators on the big picture. The high school examiners felt that the format could be improved to show the progression of skills and that the language complexity might be too difficult for some

parents. They also felt that standards by individual grade levels need to be clarified, especially for parents, and that applied definitions instead of complex language would be helpful. In addition, the high school group felt that there should be a clearer connection of standards to the real world and a connection with program review and the remaining parts of Senate Bill1. Most reviewers agreed that the standards align with current research, although the middle school reviewers were concerned that no mention was found concerning brain research and adolescents. All reviewers felt that the standards were aligned so that students could be successful at each educational level and in the workplace. The progression of skills clearly shows growth and development over time, however, once again, the disconnect between reading and writing was noted.

Reaction Summary – Supports for Kentucky Educators

Mathematics

Participants in mathematics organized their ideas for supports needed by Kentucky educators into several categories:

- Professional development – Groups listed and discussed issues relating to instructional practices; sustained, ongoing, job-embedded PD; intervention strategies; release time/common planning time for teachers; PD for administrators and curriculum experts.

- Communication – Participants focused their thinking on the importance of a careful, thoughtful, and significant roll-out for the *Common Core Standards;* clarification of connections to Senate Bill 1; an emphasis on mutual responsibility as opposed to accountability; eliciting business and community buy in; updating legislators regularly and providing them feedback from schools.

- Assessments – Participants determined that teachers will require professional development on identifying and using Depth of Knowledge (DoK) to create their own engaging and authentic classroom assessments. Teachers must be able to design and implement formative assessments (assessment for learning) to meet the requirements of Senate Bill 1. KDE and local education agencies (LEAs) will need to develop and offer benchmark assessments to help meet the new criteria.

- Resources – Groups discussed several resource issues: the importance of a K-5 inventory of materials at the building level, a survey of textbooks to see which ones support the new standards, math intervention coaches, an information "bridge" to take teachers from where they are to where they need to be, math labs in schools or math centers in classrooms, a learning map versus a curriculum map, and appropriate technology and PD to ensure its most efficient use.

- Teacher preparation – Participants considered several issues around this topic: new teacher preparation courses should align with the standards, a course in deconstructing the standards should be offered, KTIP should be redesigned to include more coaching, methods courses should contain more field experience, postsecondary should standardize

math courses for elementary majors and require at least one year of math, and certification should be re-examined at all levels.

- Transition from old to new standards – A companion guide or crosswalk to help teachers understand the transition from the current program of studies and core content will be necessary.

- Leadership – School and district leaders will need professional development to help them understand the new standards and content knowledge required, to recognize effective teaching, and to provide ongoing support and resources for teachers.

- Bridging the gap for students – As standards are introduced in schools, Kentucky students will not have experienced the building blocks for the new standards in previous grades. Educators will have to plan for this.

Language Arts

Participants in language arts organized their ideas for supports needed by Kentucky educators into the following categories:

- Communication – The group felt that all stakeholders would need a coordinated introduction of the new standards that would include an explanation for the transition to the core standards and a description of the expected impact of the core standards on student achievement. The standards would have to be "sold" to get buy-in from all. Information would need to be parent/community friendly to support understanding.

- Professional development – Initial professional development would involve familiarizing teachers and administrators with the new standards, how they are different from the old ones, and how to bridge the gap between the two. Time and schedules for ongoing, embedded PD should be provided at the school level to support the implementation of the standards through professional learning communities in which the instructional staff collaborates to align the curriculum to the new standards, create curriculum maps, design lessons and units, pool resources, and support one another. Additional topics for teacher training need to involve (1) the effective teaching of drama; (2) the use of incentives to reward and encourage students; (3) additional training in the effective use of technology for teaching and learning; (4) creation and use of rubrics; (5) types of assessment—formative, benchmark, and summative; (6) assessment of listening and speaking assignments; (7) writing and reading across the curriculum; and (8) effective instructional techniques that allow teachers to differentiate instruction to meet the needs of all students.

- Resources and materials – Students will need equal access to computers (all classes, all day); additional texts to provide the variety and quality of reading material needed for each subject at each level; and additional, varied reading materials to include periodical, online subscriptions, etc. Additional staff might be needed for resource management and media support. Time management should be looked at creatively to allow for the best use

of teacher time (release from recess duty, bus duty, etc. to work on curriculum and instructional issues).

- Structured support from the state and district – Support would include a website devoted to the common standards, including such things as classroom-level examples/models, sample lessons, video clips of lessons being taught in actual classrooms, and lists of resources telling where to get more information or help.

- Teacher preparation programs – The state should work with teacher preparation programs to communicate changes in curriculum requirements and also to encourage the use of the effective, research-based instructional strategies that would best convey that curriculum to all students.